Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

The characters of position of lateral line and numbers of pectoral rays used by Jordan and Evermann as a clue in this group are not noted by Dr. Smitt. D. S. J.

Abbott on Chilean Fishes. — Mr. James F. Abbott, a graduate student of Stanford University, now teacher in a Japanese academy at Otsu, gives in the *Proceedings* of the Academy at Philadelphia notes on fishes collected at Valparaiso by Rear-Admiral Beardslee, U. S. N. Among these is a species of *Hippoglossina macrops*, which was originally, perhaps, incorrectly recorded as from Mazatlan. There is also a new species of Sebastodes, allied to *S. oculatus* and *S. darwini.* To this Abbott gives the name of *Sebastodes jenynsi.*

D. S. J.

Moreno on the Olfactory Nerves of Fishes. — In the *Annals of the Natural History Society of Madrid*, José Madrid Moreno gives an account of his studies of the olfactory nerves of fishes carried on in the laboratory at Naples. The anatomy of these nerves and their terminations is described in species of Scylliorhinus, Catulus, Scorpæna, Raja, Pagellus, and Serranus. D. S. J.

California Water Birds — No. IV (*Proc. Cal. Acad. Sci. Zoöl.*, Vol. II, No. 3, 1900). — Mr. Leverett M. Loomis gives us the latest results of his studies on the migration of sea birds on the western coast of North America. The bulk of the paper consists of a detailed record of observations made at Monterey Bay and vicinity from Sept. 18, 1896, to Nov. 14 of the same year; but the portion of most interest, at least to the general zoölogist, is the discussion of the data obtained, and the conclusions drawn.

The following extracts will indicate not merely the results arrived at by the author, but as well the scope of his studies in this difficult but fascinating field; for the evidence on which the conclusions rest, the paper itself must be consulted.

"These investigations seem to prove (1) that the Shearwaters off Monterey find their position and shape their course by the landmarks ; (2) that birds do not possess a mysterious superhuman faculty for determining direction, else the Shearwaters would not have been bewildered in the fog."

"It seems reasonable to conclude that young birds in the journey from their birthplace to the winter home of the species are dependent upon the guidance of the old birds who know the way, because they have traveled it."

"To sum up the whole matter in a single sentence: It is held that bird migration is a habit evolved by education and inheritance which owe their origin and perpetuation to winter with its failure of food."

W. E. R.

Ovogenesis in Tunicates. — Dr. F. W. Bancroft has published (*Bulletin of the Mus. of Comp. Zoöl.*, Vol. XXXV, No. 4, 1899) an extended account of his studies on the ovogenesis of *Distaplia occidentalis*.

In general, the development of the gonads and their ducts resembles that found in Perephora, Clavelina, and Ciona.

The most significant difference consists in the fact that the fundament of the ovotestis is present in the youngest stages in Distaplia, whereas in the other species it appears quite late in ontogeny.

To the question which type of ovary is more primitive, that represented by Clavelina, where there are two separate germinative epithelia, or that found in Distaplia with but a single such epithelium, the author is inclined to give the distinction to the Distaplia type, since here it occurs in a smaller and simpler species, and is itself simpler.

Dr. Bancroft goes at length into the question of the origin and fate of the test cells, discussing the whole matter in the light of the more recent statements by Davidoff and Salensky, based on their observations on *Distaplia magnilarva.* He does not confirm the results of these authors, and as his studies pertained to a species very closely related to the one studied by them; and, furthermore, as he had the opportunity, through the great courtesy of Professor Salensky, to examine slides of *D. magnilarva*, it would seem that his critical findings should be conclusive on this much discussed problem.

The function of these cells, the author believes, is to furnish nutriment to the growing ovum. He concludes that they are particularly active in this capacity in the early stages of the growth of the ovum, while the nucleus exerts its principal activity in the later stages in converting this nutritive material into yolk.

The germinative vesicle diminishes in size gradually and continuously with the increase in quantity of yolk in the ovum.

W. E. R.

Reproduction of Amœba. — In addition to the common and recurring bipartite division of *Amœba proteus*, Scheel[1] has described a

---

[1] Scheel, C. Beiträge zur Fortpflanzung der Amœben, *Festschrift zum siebenzigsten Geburtstag von Carl von Kupffer*, pp. 569–580, Pl. LI. Jena, 1899.